

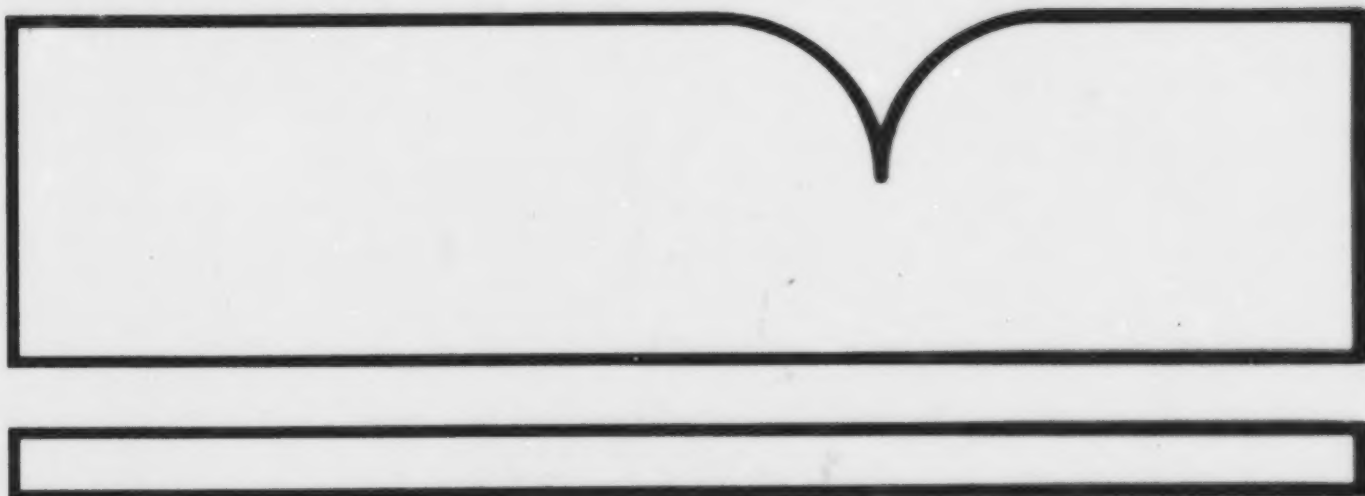
An Evaluation of Strategies to Control
Noise from Minibikes

Metropolitan Washington Council of
Governments, DC

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AN EVALUATION OF STRATEGIES
TO CONTROL
NOISE FROM MINIBIKES

OCTOBER 1981



U. S. ENVIRONMENTAL PROTECTION AGENCY
Office of Noise Abatement and Control
Washington, D. C. 20460

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16. ABSTRACT This report covers a series of potential control strategies for minibike noise which can be used in a metropolitan jurisdiction. Other jurisdictions would gain insight into their minibike noise problems from reading this report. These potential strategies include: a curfew alternative; a specific use area; prohibited use on public land except recreational areas and on private lands with permission of the owner; and a exploration of the possibility of a registration/licensing fee. The study was made in Montgomery County, Maryland, which is a large and wealthy suburban area that is part of the Washington, D. C. metropolitan area. Exploration of the curfew alternative indicates that it is not a particularly effective strategy in controlling minibike noise; parental curfews prevail as minibiker are frequently early teen-agers. Other proposed control methods are similarly explored. The authors feel that the combination of strategies explored have resulted in a noise reduction for minibikes in the country. The reduction in minibike noise complaints would, undoubtedly, be greater if the specific use area strategy had been implemented in Montgomery County. Other jurisdictions are strongly encouraged to implement this strategy. The highlight of this study was a minibike rodeo to educate owner-operators on the operation of minibikes.		
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Foreword

In October, 1976, the U.S. Environmental Protection Agency (EPA) contracted with the Metropolitan Washington Council of Governments (COG) to develop a plan to evaluate specific noise control strategies in a major metropolitan area. During the performance of that contract, staff from COG and six of its area jurisdictions, identified noise source targets for study and developed a series of potential strategies for evaluation. The overall plan was then presented to EPA for their consideration for funding of the implementation phase.

The contract for the implementation phase of the study was awarded in September, 1977. Specific work elements included the development of two educational modules and the investigation of control strategies for grain dryers, air conditioning/refrigeration equipment, minibikes and refuse collection vehicles. For each specific noise source to be studied, a jurisdiction within the metropolitan Washington area was selected to work with COG in the investigation.

This report on the noise from off-road minibikes is one of a series describing each of the activities undertaken. The format for each report details the strategies evaluated and assesses the experiences encountered. Each is designed to provide guidance for other state and local noise programs faced with similar noise problems. Hence, emphasis is placed on the practical aspects of attempting to implement innovative approaches.

This investigation of control strategies included: exploration of a curfew alternative; a specific use area; prohibited use, except in recreational areas, and/or on private land with owner's permission and a registration/licensing fee. The report also describes an educational control strategy, a minibike roundup, which was an outgrowth of the study.

The contents of this report were prepared by the authors under contract with the U.S. Environmental Protection Agency. Therefore, the opinions, findings, conclusions and recommendations expressed are not necessarily those of EPA. The mention of trade names or commercial manufacturers included herein does not constitute an endorsement by either EPA or the authors.

Noise Control for Minibikes:
Strategies Investigated and Findings

Introduction

Minibike noise has been a frequent source of noise complaints in several jurisdictions in the metropolitan Washington area. In this investigation of possible strategies for minibike noise control, Montgomery County, Maryland, agreed to participate with the Metropolitan Washington Council of Governments (COG), in evaluating various potential control techniques. The study included the following elements: (1) survey of principal areas affected and determination of factors contributing to annoyance, (2) investigation of limitation of hours of operation, (3) identification of a specific use area for minibikes and exploration of prohibited use areas, (4) exploration of the possibility of a registration/licensing fee and (5) minibike roundup.

In this report, the procedures employed for the evaluation of each element of the study are described and the conclusions detailed. It should be noted that alternatives, which were rejected for the Montgomery County, Maryland area, might provide successful control strategies elsewhere. Thus, wherever possible, information which would assist in implementing these strategies is referred to in the text and/or included in the appendices.

I. Survey of Principal Areas Affected by Minibike Noise and Factors Contributing to Annoyance:

Initially an analysis of all minibike noise complaints received by the County since the noise ordinance became effective in October, 1976, was conducted. This analysis included: date, time, location and disposition of complaint. The findings are shown in Appendix 1. Complaints were then charted on a map to identify major problem areas. Two regions, Wheaton and Silver Spring, were found to be particularly impacted. These two areas both have high populations of pre-teen and young teen-agers who tend to be frequent minibike users.

To gain insight into the probable magnitude of minibike usage in the County, statistics from the Motorcycle Industry Council's Motorcycle Statistical Annual were used as a basis for determining the number of minibikes in the County. This reference document provides motorcycle population figures by use category for each state and motorcycle penetration figures per 100 population. The figures for the State of Maryland are shown below.

	Motorcycle Population	On-Hwy	Off-Hwy	Dual Purpose	Motorcycle Penetration Per 100 Population
Maryland	110,400	56,600	24,100	29,700	2.7

The total population of Montgomery County, Maryland, is 591,400. Thus, if we assume 2.7 motorcycles per 100 people, the total motorcycle population in the County would be 15,900 motorcycles. Since approximately 21.8% of the total motorcycle population could be assumed to be off-road motorcycles, there would be approximately 3,500 off-road motorcycles in the County. Off-road motorcycles are dominated by small engines. According to the MIC, nearly two-thirds have an engine displacement of less than 125 cc's. Minibikes fall into this small engine category. Thus, it can be estimated that the minibike population in the County is in the neighborhood of 2,300 minibikes.

In the review of complaint data, discussions with parents, minibike owners and motorcycle dealers, several factors emerged which contributed to noise annoyance. Improperly functioning mufflers, or altered mufflers, are frequently mentioned as a source of irritation. The other major problems seem to be related to use in residential areas, unauthorized use on private lands and inconsiderate riding practices.

The major enforcement problem, for noise control officials in the County, is being able to locate the minibike operator after a complaint has been filed. This is particularly difficult when the minibikes are being ridden on large tracts of land with irregular terrain. Thus, response to individual complaints is often time-consuming and, ultimately, non-productive.

II. Investigation of Limitation of Hours of Operation:

Initially, the procedures necessary to establish a curfew for minibike usage in Montgomery County were identified. To establish a curfew would require action by the County Council and cooperation by the police department would be necessary for enforcement. Closer examination of the minibikes and minibike use practices revealed that the establishment of a curfew would not significantly assist in the amelioration of the noise problem.

The reality is that darkness generally provides a self-imposed curfew. The majority of the minibikes are not equipped with lights for nighttime use. The few that do have lights are still severely restricted in activity due to the limited visual field provided by the light. In addition, since many of the minibike users are quite young, parents, also, provide curfews. These findings are consistent with the small number of nighttime complaints received in Montgomery County. A similar complaint pattern has also been observed in two other counties in the metropolitan Washington area.

Thus, the curfew alternative was rejected as an effective approach to reducing minibike noise in the County. However in jurisdictions where there are frequent nighttime complaints, older users, and well-lighted areas, ~~conducive to night time use,~~ this alternative has obvious merit.

III. Identification of a Specific Use Area for Minibikes and
Exploration of Prohibited Use Areas:

The exploration of this alternative was the most exhaustive, perplexing part of the study. In Montgomery County and, probably elsewhere as well, identification and acquisition of a specific use area requires careful planning and extensive interdepartmental and county/state cooperation. To assist other jurisdictions, who may wish to pursue this alternative, names and addresses of persons who assisted us and materials acquired in our research are included, either, in the text or the appendices.

Initially, it was necessary to determine the basic characteristics of an area which would be suitable for off-road minibike use. Discussions with the Motorcycle Industry Council (MIC) representatives and use of the Land Use Information Kit, developed by the MIC, provided valuable assistance. Appendix 2 includes several of the informational papers. Basically, there are several possibilities in terms of a special use area for minibikes. These are trails, which take advantage of natural terrain, open field areas and indoor skill courses. A prime factor in selection is the identification of an area where the noise impacts will be minimal. Ideally, use should be limited to small bikes and safety rules and regulations should be posted and firmly enforced. A comprehensive publicity campaign through the schools, motorcycle dealers and associations is also necessary.

Although there were no trails in Montgomery County, specifically, for off-road vehicle use, staff identified a series of trails throughout the State that are maintained by the Department of Natural Resources.

Maps showing these trails were reproduced and provided to dealers and associations for distribution to minibike riders. In order to use these trails, persons who do not have a learner's permit or driver's license, must be accompanied by either a parent, guardian or licensed driver. Unfortunately, the regulations prohibit use of the trails by children under 12. The regulations further require that off-road vehicles be muffled and operated so as to prevent excessive noise. There are specific noise levels set as shown below:

Motorcycles and all other off-road vehicles. A person may not operate a motorcycle or any other off-road vehicle on Department lands that produces a maximum noise exceeding the following noise level limits measured at a distance no less than 50 feet from the point of operation under test procedures established by the Society of Automotive Engineers, Inc. (SAE), the American National Standards Institute (ANSI), or the American Society for Testing and Materials (ASTM).

Noise level limits and their effective dates for enforcement are:

Vehicle	Date of Manufacture	Maximum Sound Level at 50 Ft. (as tested by SAE J331a or Equivalent)
Motorcycles and all other off-road vehicles	After July 1, 1976	86 dB(A)
	After January 1, 1979	84 dB(A)

Enforcement is carried out by teams of officers trained in noise measurement procedures.

Distribution of trail information through dealers has several advantages. Since dealers handle both new bikes and provide replacement parts and services, they are in contact with new and old minibike users. Also, through the dealers, trail information reaches users of the larger motorcycles as well. We feel confident the material is reaching the users as we receive regular requests for additional maps. The maps are accompanied by a summary of county/state minibike regulations.

The maps and regulation summaries are now being given to each minibike operator contacted because of noise complaints. In addition, the information is being distributed through the Middle Atlantic Moto-Cross Association, Inc. This is an organization which promotes wholesome, environmentally sound, family biking concepts. It is targeted to young people ages 5-17 years. Other jurisdictions with minibike noise problems are encouraged to contact this group to identify similar groups in their communities. The address is: 3318 McComas Avenue, Kensington, Maryland 20795.

The exploration of the specific use alternative necessitated the determination of existing rules and regulations in the County governing minibike usage. This research provided answers to several other study elements as well. Existing County regulations prohibit the use of minibikes on public roads, in County recreational areas and on private lands without permission of the owner.

The prohibition of use in County recreational areas was the result of a pilot "go-cart" program initiated several years ago.

Apparently this venture was quite unsuccessful and prompted the Council to take action to prohibit further activities of this type. Concerns ranged from administrative problems to specific safety and liability concerns. In fact, two accidents did occur. Thus, the concept of a County operated specific use area on County owned recreational land was not a viable alternative due to existing legislative constraints.

As previously mentioned, County regulations also prohibit the use of minibikes on private lands without permission of the owner. Thus, the legal mechanism for control exists. However, in practice, the problem of enforcement remains substantial. In some instances, horse-mounted police have been used to pursue offenders.

In those situations where an individual, private landowner gives permission for minibike use, certain landowner/liability laws apply. The American Motorcyclist Association has prepared a pamphlet called, "Landowner Liability Laws." It may be obtained by writing the American Motorcyclist Association, P.O. Box 141, Westerville, Ohio 43081. For those jurisdictions who want to determine the status of landowner liability in your state, Appendix 4 contains the applicable laws by state and the phone number of the legislative service to call to obtain copies of those laws. Knowledge of the applicable liability laws can be useful in counseling private landowners regarding the advisability of allowing bikers to ride on their land. In cases where noise disturbances are occurring, knowledge of the liability laws may influence the property owners' decision regarding continued use.

In the State of Maryland, the law which applies is §-5-1101 et seq., Annotated Code of Maryland, Public Recreation on Private Land. Our staff sought legal interpretation to assure that any information provided would be correct. Other noise staffs are encouraged to do so, as well, because a laypersons' interpretation is often incorrect. The Maryland law is shown in Appendix 5.

In the course of the exploration of the specific use alternative, Montgomery County noise personnel and COG staff held discussions with the Park and Planning Commission. It was pointed out by commission representatives that even if there were not legislative constraints to setting up a County owned and operated specific use area, it would have to be approved as a part of the Capital Improvements Budget. This budget process had been completed for FY-1979. In terms of operational costs for a specific use facility, it was estimated that a fee of \$2.50 per user would probably cover maintenance, insurance and personnel costs. The co-operation of the Department of Recreation would be needed for personnel to operate the facility.

Two other possible options were identified. These were private management of the facility on public land and/or private ownership on private land. Private management would have certain advantages. The County would not be responsible for maintaining the facility and would not need to provide insurance against accidents since both would be handled by the private management. In Montgomery County, however, we were unable to identify private individuals who might be interested in a project of this type. One approach which

might work for other jurisdictions would be to contact owners of large tracts of land where minibike operators are known to ride, seeking their interest in the project. Secondly, it is possible that a request for proposals could be issued.

In our investigation of the specific use alternative, two other options were identified, which might be useful to jurisdictions with minibike noise problems.

The Bureau of Land Management (BLM), a part of the Department of Interior, is currently designating areas where off-road vehicles may and may not be used on the 474 million acres under its control. This is in response to an Executive Order 11644, "Use of Off-Road Vehicles on the Public Lands." Most of this land is in Alaska and eleven Western states. For other jurisdictions in these areas, it may be worthwhile to contact the BLM for information regarding available trails.

A second possibility which could be explored is the Department of Interior's "Rails to Trails" program. This program is under the Interior's Bureau of Outdoor Recreation (BOR). In this program, grants are being made to state, local and federal government agencies to allow them to plan, acquire and develop abandoned railroad rights-of-way for a variety of recreation and conservation purposes. For those jurisdictions interested in obtaining further information about this program, a list of the BOR Regional Offices is shown in Appendix 6.

Finally, in our search for a specific use area, one possibility which was identified, was a landfill area. The area is currently targeted for ball parks and other recreational uses. We were advised it was possible, with only minimal improvements, to make this area usable for minibikes. Other jurisdictions may wish to explore this possibility.

IV. Exploration of the Possibility of a Registration/Licensing Fee:

The State of Maryland Department of Natural Resources has, for those who want to use the department's trails, requirements covering registration and licensing which apply to minibike operators. The identification tags and certificates of registration cost \$5.00. The owner must provide: (1) name, address and telephone number, (2) county and state of residence, (3) type of off-road vehicle, (4) make, model, year, horsepower, cylinders of vehicle, (5) serial number of vehicle and (6) signature. Identification tags are three and one-half inches by six inches, displayed on rear of vehicle and must be visible at one-hundred feet during daylight hours. The tag must be renewed annually and authorizes use only in areas under the authority of the Department of Natural Resources.

At our request, the Department of Natural Resources personnel checked and found that only a few minibikes are registered. Reasons include: cost, the age restriction for use, the complexity of many of the trails, transportation problems and limited knowledge of the trails availability. It will be interesting to see whether minibike registration increases next year in view of the publicity campaign initiated about the trails as a part of this study.

In the State of Maryland, legislative authority for registration and licensing of vehicles must be delegated to local authorities before such practices can be implemented. A Bill, HB-327, which

would have required biennial registration of off-road motorcycles at the State level failed to pass. Had the Bill passed, the fee for licensing and registration plates would have been \$10.00.

A second Bill, HB-569, was designed to provide local authorities, in the reasonable exercise of police power, the right to regulate the operation of unregistered motorized recreation vehicles. The authority would have included both the right to require registration and to impose a registration fee. Unfortunately, this Bill also failed to pass. Consequently, local governments, within the State of Maryland, do not have the authority to impose mandatory licensing and registration at this time. In other jurisdictions where the authority for licensing and registration exists, this approach has several positive benefits. It provides:

- (1) a mechanism for determining both the number and location of minibikes within the jurisdiction,
- (2) the license plate would allow easier identification of minibikes violating regulations and
- (3) revenues from the registration might be used for establishing a special use area if it were allowed by the jurisdiction in question.

V. Minibike Roundup:

Since our exploration of both the specific use area and the mandatory registration/licensing approach resulted in existing legislative roadblocks in Montgomery County, the authors developed the idea of a Minibike Roundup. The Roundup presented several advantages, including an opportunity to provide a voluntary registration program and an opportunity to distribute maps of available trails and information on minibike regulations and quiet maintenance practices. In addition, it provided an excellent public education mechanism through the curiosity of "onlookers" and resultant newspaper and television coverage.

The Roundup was scheduled on a Saturday between 10:00 a.m. and 3:00 p.m. at the Korvettes' Parking Lot. Since Korvettes is located in a shopping center area and is adjacent to a major roadway, gathering an audience was relatively simple. Other jurisdictions interested in duplicating this effort should be aware that, both, liability and general coverage insurance are required. If your jurisdiction does not have adequate coverage, it is possible to obtain short-term coverage for minimal cost.

During the developmental stage of the Roundup, we met with the Motorcycle Industry Council and the major minibike dealers in Montgomery County. Their assistance in the development of the concept, publicity and staffing for the Roundup was most valuable.

The publicity campaign included press releases, flyers placed in schools, recreation centers and dealerships. The American Motorcycle Association also distributed flyers to their member clubs

in the area. To arrange this, one must send the flyer to Mr. Robert Rasor; American Motorcycle Association; P.O. Box 141; Westerville, Ohio 43081. The association does not disclose members' names. A copy of the flyer is shown in Appendix 7. Posters were placed at Korvettes and in the schools. One of the dealers placed an advertisement in the newspaper at his own expense.

The elements of the Roundup were: a skills' test, noise inspection, air emissions inspection, display of the latest in minibikes, an information center which included posters on proposed EPA motorcycle regulations, voluntary registration, a display by the Middle Atlantic Moto-cross Association, the EPA noise van, free earplugs and EPA noise buttons for everyone. The State of Maryland Department of Natural Resources provided information for distribution and the State Police conducted noise inspections.

Materials distributed, or used in the development of the Roundup, are shown in Appendix 8. All the materials were obtained free of charge.

Participants were required to complete registration before participating in the skills' test. The registration form is shown in Appendix 7. They were also encouraged to take registration forms for friends.

Upon completion of registration, they were eligible to participate in the skills' test. The skills' test required the minibike operator to follow a colored line around a series of barriers (traffic

cones) and across a long board. Accuracy was the object; three judges rated the performance. A perfect score was zero. Penalties were imposed for going off the line, putting a foot down and knocking over a barrier. Each contestant was given two opportunities to complete the course.

After completion of the skills' test, the minibikers proceeded to the noise and air emission measurement stations. Noise measurements were taken twenty inches from the exhaust pipe by two State troopers. Noise levels ranged from 90 dB - 110 dB. Interestingly, the oldest bike (1972) was the quietest. According to both the officers and the dealers, this bike was perfectly tuned and, obviously, well maintained. To the delight of the sponsors, this bike's owner also won the skills' test. Conversely, one of the noisiest bikes had been fitted with a noise suppression device (retrofit pipe) in an attempt to quiet it. The noise level was reduced, but still very loud. Parents were concerned and delighted to learn of the minibike trails where noise would not annoy neighbors.

Air emission readings were obtained for carbon monoxide (CO). Readings ranged from .7 to 1.3. All minibikes with readings of 1.0 were encouraged to consult their owner's manual and have a carburetor fuel/air mixture and timing adjustment made. In general, the CO measurements were typical of those associated with new cars. A pamphlet, "What Comes out the Tailpipe," was distributed.

At the Roundup, a mini-survey was also conducted to obtain information regarding support for a specific use area. A copy of the survey is shown in Appendix 9. This was conducted at the request of the Montgomery County noise staff. Generally, there was support for a specific use area. Respondents indicated a willingness to pay for such an area (\$1.00 to \$2.50 per use) and to travel up to an hour to get to the facility. Most respondents indicated they would be willing to have the facility near their homes. Naturally, it should be kept in mind that the majority of the respondents were interested in minibiking.

Prizes for the Roundup were provided by the Middle Atlantic Moto-cross Association and area dealers. The Moto-cross Association donated a trophy and the dealers provided T-shirts, gloves, helmets and goggles. It was the consensus of participants that if the Roundup were repeated several times, the number of youngsters participating would rapidly multiply. In fact, the Middle Atlantic Moto-cross Association has already communicated their interest in supporting future efforts. See Appendix 10. As previously noted, the Roundup received both newspaper and television news coverage.

As a follow-up to the Minibike Roundup, letters were sent to each child and each parent. Examples are shown in Appendix 11. In addition, the Veterans of Foreign Wars Auxiliary, Post 5633, sent each youngster a light-reflecting safety tag for their minibikes and a letter encouraging safety and environmental awareness. This was an outgrowth of a contact made at the Roundup.

Since this Minibike Roundup, aimed at safety and environmental awareness, was our first effort of this type, we compiled a list of changes and additions we would recommend for future Roundups.

A week before the Roundup, schedule noise and air emission qualifying tests. This will allow those owners with problems enough time to have repairs made before the big day. It will also provide an opportunity to obtain advance publicity which will maximize participation. Also, announce prizes for the youngster bringing the most registrations to the Roundup. The Motorcycle Industry Council has television public service announcements about minibike noise. Arrange well in advance (two months lead time) to have these announcements aired with a "tagline" concerning the upcoming Roundup. Contact the Middle Atlantic Moto-cross Association very early to allow maximum time for them to publicize the event.

At the Roundup, plan on at least ten staff persons. Remember to arrange for tables, display boards and handouts. Ideally, one should arrange for a medic, rest room facilities, a public address system, seats for spectators and vendors for food and drinks. We discovered that most people come for the duration of the event. It also would add "a touch of class" to have, either, an elected official, or a sports personality to present the awards. This approach encourages maximum press coverage. Finally, it would be ideal to arrange for pickup service for the kids and their bikes. This might be accomplished through the Motorcycle Associations in

your area. If these ideas exceed your budget capabilities, don't be discouraged. We are now convinced that with adequate lead time, almost every approach described can be achieved on a voluntary basis.

The Minibike Roundup was a very successful mechanism to provide a public information day to encourage youngsters to be environmentally aware. As one eleven year old stated in her television interview, "today, I've learned that being environmentally aware can be fun."

VI. Summary and Conclusions:

In this study, the Metropolitan Washington Council of Governments, in cooperation with the Department of Environmental Protection, Montgomery County, Maryland, explored a series of potential control strategies for minibike noise. These included: a curfew alternative; a specific use area; prohibited use on public lands except recreational areas and on private lands, with permission of the owner, and exploration of the possibility of a registration/licensing fee. Also investigated, was an educational control strategy, a Minibike Roundup. The purposes of the study were to explore the potential of the control techniques in a large metropolitan jurisdiction and to develop a report which would assist other jurisdictions in evaluating and/or implementing the control strategies based on their local conditions. The study was funded by the U.S. EPA, Office of Noise Abatement and Control.

Exploration of the curfew alternative resulted in the conclusion that it would not be a particularly effective control strategy in Montgomery County. In compiling our profile of complaints, it was noted that few complaints were reported in evening hours. As we became familiar with the typical minibiker and the typical minibike, the reasons (which are summarized below) emerged. Most minibikers are not equipped with lights. Minibikers are frequently pre-teen or early teen-agers, thus, parental curfews also prevail. Curfews would be useful in jurisdictions where conditions are more conducive to nighttime minibiking. An example of this would be a situation where a lighted, specific use area is provided.

In the search for a potential specific use area, it was necessary to first determine areas where use was prohibited. Existing legislation prohibits use on public roadways, on private land without the owner's permission, and in county-owned recreational areas. These legislative constraints do provide the authority to restrict use when it is possible to apprehend the violator. However, in practice, enforcement is often a problem due to the minibikers ability to disappear on large tracts of land before the enforcement official can arrive on the scene. Jurisdictions who do not have prohibited use provisions would, undoubtedly, find them helpful. Yet, it should be remembered that enforcement efforts may often be time-consuming and non-productive. Fortunately, in most cases, the knowledge that use is prohibited will minimize the number of minibikers who will, knowingly, violate the law.

The fact that county regulations prohibit use of off-road vehicles in county owned recreational areas was somewhat unfortunate since it precluded these areas from consideration under the specific use area alternative. The regulation was the result of an unsatisfactory "go-cart" experiment which created citizen concern and official dismay regarding problems associated with management and liability. In any case, a county owned and operated facility would require approval as part of the annual Capital Improvement Budget. Naturally, operational costs will vary from one jurisdiction to another, however, in Montgomery County, it was estimated that a \$2.50 entrance fee per user would cover maintenance, insurance and personnel costs.

Other options considered in the identification of a specific use area, which may be achievable in other jurisdictions, included: private management of a facility, either, on public land or private land; the Department of Interior's "Rails to Trails" Program, and the Bureau of Land Management's designated off-road use areas. Each is described in the text and Appendix II and contains information to be considered in the selection and management of a special use area.

In Montgomery County, the area identified as a possible future specific use area was a landfill, which would require only minimal improvements, if citizen, administrative and Council approval for this type of use could be obtained.

Although unable to implement a specific use area in the County during the study, we were able to identify a series of Department of Natural Resources' trails available for minibikers in the State. This information was widely disseminated during the year. Throughout the course of our exploration of the specific use alternative, we found wide support for the concept from the MIC, dealers, parents and youngsters. Thus, if possible, other jurisdictions are strongly encouraged to explore and implement this control strategy. It provides the opportunity to give youngsters a safe place to enjoy their minibikes without adversely impacting others.

During the exploration of the registration/licensing fee, it was discovered that the State Department of Natural Resources does have requirements that apply to minibikers who wish to use their trails. The fee is five dollars a year and must be renewed annually.

A survey revealed the few minibikers who have been registered. In Maryland, for a county to implement such a program, State authorization is required. A bill, which would delegate this authority to localities, was defeated. Hence, this approach was not feasible in Montgomery County. For other jurisdictions who do not have this constraint, there are several potential benefits. These include: precise information on the minibike population, easier identification of offenders of regulations and revenues which could possibly be used for development of a specific use area.

The final strategy explored during this study was an educational awareness event which we called a Minibike Roundup. It was held at a local shopping center and activities included: a voluntary registration program; an information center with maps of trails for minibiking; summaries of minibike regulations; hints on maintenance for quiet cycling; air emission and noise measurements; a skills' course; the EPA noise van, and lots of free literature about noise. This event resulted in excellent newspaper and television coverage, while providing a perfect opportunity to encourage environmental awareness in minibikers. The procedures for implementing a Roundup are described in the report. Other jurisdictions are encouraged to consider a similar educational strategy. Through the Roundup, we were able to reach minibikers, parents, shoppers and the media audience with a message for quiet. If it were possible, we would expand this event to include other area jurisdictions with similar minibike noise problems.

In conclusion, it is our opinion that the combination of strategies explored and contacts made during this study have had a positive impact in reducing minibike noise problems in the County. During the period of the study, there has been a 50% reduction in the number of minibike noise complaints received by Montgomery County's Department of Environmental Protection. Probably one of the more significant contributions to this reduction has been the cooperative relationships established with dealers who have been distributing trail information and minibike regulation summaries. It is felt these activities and other public awareness efforts have generated more considerate minibiking practices in the County. The reduction in minibike noise complaints would, undoubtedly, be greater had we been able to implement the specific use area. Other jurisdictions are strongly encouraged to implement this strategy, if possible.

Appendix I

Analysis of Minibike Noise Complaints
in
Montgomery County, Maryland

October 1, 1976 - January 18, 1978

<u>Date/Time</u>	<u>Location</u>	<u>Disposition</u>
Daily 2-4:30 p.m. 3 Nov. 76	Parker Avenue Wheaton	Investigated - Source owner installed muffler
4 p.m. weekdays Various hours weekends 14 Mar 77	Emory Lane Olney	Investigated on two occasions. No violations observed
Various times 12 Apr. 77	Garrett Park Road Wheaton	Investigated. Riding on vacant lot. No violations observed. Police also investigated
Various times and dates 20 Apr. 77	McNeil Lane Silver Spring	Investigated several times. No violations observed
Evenings & weekends 22 Apr. 77	Elton Road Silver Spring	Investigated. No violations observed
4 p.m. 22 Apr. 77	Parkmill Drive Silver Spring	Investigated. No violations observed
9 a.m. - also various times in evenings 27 Apr. 77	Connecticut Ave. Wheaton	Investigated. No violations Posted right-of-way along roadway
11:30 p.m. 2 May 77	Dalewood Drive Silver Spring	Investigated - operating in driveway - abated by owner
5 p.m. evenings 18 May 77	Queen Mary Drive Olney	Investigated. Riding on property owned by County Rehabilitation Center. Signs posted "No Trespassing"
Various hours & dates 18 May 77	Randolph Road Silver Spring	Investigated numerous times. Evidence of riding on large acreage along roadway. Riders observed but not encountered due to large area. Police have also investigated
Various hours & dates 26 May 77	Brooke Road Sandy Spring	Investigated. No violation observed. Evidence of use by mini-bikes
Various hours & dates 17 June 77	Sampson Road Wheaton	Investigated. Riding on private property. Source abated by owner
2:30 p.m. 20 June 77	Frederick Road Germantown	Investigated. No violation observed

<u>Date/Time</u>	<u>Location</u>	<u>Disposition</u>
1:30 p.m. 22 June 77	Bryants Nursery Road Silver Spring	Investigated - Source owner directed to abate noise
Various hours & dates 11 July 77	Applewood Lane Derwood	No violation observed. Evidence of use by mini-bikes
Various times & dates 13 July 77	Randolph Road Wheaton	Investigation coordinated with County Police, large tract of land adjacent to roadway
Various dates & times 19 July 77	Norwood Road Silver Spring	Investigated. Source owner directed to abate noise. Riding on private property
Various dates & times 1 Aug. 77	Bel Pre Road Silver Spring	Investigated - riding on private property. Source owner directed to abate noise
Various hours & dates 11 Aug. 77	Randolph Road Wheaton	Two previous complaints coordinated with police, large tract of land evidence of riding - no one encountered
1-1:30 p.m. 13 Oct 77	Connecticut Ave. Wheaton (Aspen Hill)	Referred to Wheaton Glenmont Station - police riding on right-of-way
10:30 a.m. - 2:30 p.m. 25 Oct. 77	Dalewood Drive Wheaton	Source owner advised of noise ordinance, directed to abate noise
Various hours & dates 15 Nov. 77	McCall Street Rockville (Aspen Hill)	Investigated - Source owner abated noise. No reoccurrence
7:20 a.m. - 7:25 p.m. Various dates 22 Dec. 77	Second Avenue Silver Spring	Referred to County Police Silver Spring. Riding on street
Various dates 3:30 p.m. 28 Dec. 77	Greenberry Drive Laytonsville	Investigated. Evidence of riding on large tract. No violations observed

Appendix II

Characteristics of Specific Use Areas for Minibikes (Based on user needs and resource management requirements)

BY JOSEPH J. WERNEX
ATV SUPERVISOR
STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES

TRUNK TRAILBIKE TRAIL

Necessary Characteristics

Provide a trail that will modify natural conditions sufficiently to be suitable for trailbike riders with novice level riding skills.

Provide a trail experience that is a definite contrast to daily living.

Trail shall provide a riding experience that is considerably more difficult than riding on forest roads.

Sufficient management practices may be in effect for the user to sense that controls and regimentation have been provided for his safety and well being.

A terminus accessible from a campground trailhead or road.

Development Criteria

Degree of modification moderate.

Rustic design is appropriate.

Use of Native material shall predominate.

Trail located and developed to accommodate moderate to heavy trailbike traffic.

Contact with others relatively frequent.

Use of surfacing shall be infrequent.

Signing sufficient to satisfy the information needs of trail users.

Developed to accommodate novice level trailbike riders.

Developed to provide short to moderately long outings from trailbike trailheads and campgrounds.

May be used for primary access routes to features of special interest i.s. waterfall, scenic vista, remote camp.

Constitutes 40%, or less, of the total trail system, (excluding roads) available for trailbike use in any general area.

Special effort made to provide loop type trails or varying length.

Foot and/or equestrian travel may be either permitted or prohibited but, in any case such use shall be incidental.

Design Features

Type -trunk- novice users, moderate to heavy traffic.

Trail to be safe and usable by trailbike riders with limited experience.

Alignment and other design features incorporated to minimize speed.

Bridges - single lane, use of native material to predominate.

Signs - rustic, unfinished.

Ballast or surfacing use infrequently and only when absolutely necessary.

PRIMITIVE TRAILBIKE TRAIL

Necessary Characteristics

Provide trails in a forest environment with a minimum of modification from the natural.

Provide trailbike riders the opportunity to develop and test skills and to compensate for the routines of daily living.

User shall sense little, if any, regimentation.

The feeling of accomplishment associated with riding skills, balance, and physical exertion is the key to the experience sensation expected at this level.

Selected primitive trails should provide access to exceptional scenic vistas and unusual natural or cultural features. (Such trail should normally require extra physical exertion to reach a goal.)

Access to primitive trail will normally be by way of trunk trail, but may be by road trailhead, etc.

Provide the maximum diversity of riding experience - including trails which require developed riding skills and special equipment.

Development Criteria

Degree of modification - minimum.

Rustic theme to be used.

Native materials used in all or nearly all cases.

Foot and equestrian travel discouraged.

Trail signed to inform users of the nature and difficulty of the facility.

Contact with others normally less frequent than on "trunk" class trails.

Developed for intermediate and advanced trailbike riders i.e. those who desire and need the opportunity to develop and test skills to negotiate rugged terrain.

Special effort shall be made to provide a maximum diversity of riding experiences including; Large rocks, deep sand, limited clearance, designed mudholes, steep pitches, stream fords, crooked alignment, sharp switchbacks, small logs left across trail etc.

Design Features

Type - primitive - experienced riders, light to moderate traffic.

Trail to be safe at minimum speeds for experienced riders.

Trail to be usable, but not convenient.

Minimum route marking needed to inform and guide traffic.

Special attention given to designing obstacles into or leaving them in the facility, i.e. narrow clearance between trees, large rocks left in trail, small logs left across trail, designed mud holes, stream fords, steep pitches, sharp switchbacks, etc.

Alignment and other design features incorporated to minimize speed and provide opportunity to develop and test skills.

Signs - rustic.

The use of ballast or surfacing to be used only in rare exceptions.



MOTORCYCLE INDUSTRY COUNCIL, INC.

MIC MODEL FACILITY NOISE CONTROL PROGRAM

Approved by
MIC Board of Directors
January 17, 1977

Approved by
MIC Technical Committee
January 13, 1977

INTRODUCTION:

This program is to provide guidance to operators of facilities for the use of off-road recreational vehicles for reducing the acoustic impact of the facility upon neighboring noise sensitive areas. This is accomplished by controlling noise levels from individual vehicles operating at the facility.

BACKGROUND:

Excessive noise from off-road vehicles, either singly or in groups, is one of the major problems facing managers of off-road vehicle use areas. Conflicts with neighbors (in the case of facilities located near residential or other noise sensitive property) or other outdoor recreationists (in the case of the off-road environment) can be minimized by adherence to a program to maintain reasonable control over the noise levels of individual vehicles.

By controlling noise from individual vehicles, the noise of groups of vehicles operating together will similarly be controlled. The proposed sound level limits will in effect restrict most motocross bikes to areas set up specifically for motocross use.

REQUIREMENTS AND RECOMMENDATIONS:

The primary responsibility in the area of noise is to comply with all state and local laws and regulations with respect to noise. Facility operators should be familiar with receiving property line noise limits, more stringent requirements for nighttime operation, and employee noise exposure regulations.

Over and above these requirements, the following can assist in reducing noise impact to prevent or minimize conflicts with neighbors, or possibly contribute towards compliance with local and state requirements.

1. Muffler Required. Every vehicle operated within the facility shall at all times be equipped with an adequate muffler in constant operation and properly maintained so as to meet the requirements of section 2 of this part. No muffler or exhaust system shall be equipped with a cut-out, bypass, or similar device.

A vehicle shall be in compliance with the requirements of this section if it meets the requirements of section 2, regardless of the configuration of the muffler or exhaust system attached to the vehicle.

2. Vehicle Noise Limits. The following noise limits, when tested according to the provisions of Appendix A, are intended as a guide to achieve reductions in noise impact. Effectiveness of a noise control program is seriously compromised if any vehicles which do not meet the applicable sound limit are permitted to operate within the facility.

<u>Effective Date</u>	<u>Level</u>
Prior to January 1, 1980	105 dBA
On and after January 1, 1980	103 dBA

The above limit is recommended as a maximum and should be revised downward if a specific noise conflict exists, if lower levels are required by law, or if technology becomes readily available which makes compliance with lower limits feasible.

At the option of the facility operator, competition motorcycles which are to be used within the facility on a course set aside specifically for competition can be exempted from the requirements of this section.

Refer to the MIC Model Racetrack Noise Control Program for specific recommendations on this subject.

3. Measurement. Each vehicle entering the facility shall be tested according to the procedures contained in "MIC Stationary Test MIC/E-76 Sound Levels of Motorcycles" (Appendix A). In addition to the sound level meters specified in MIC/E-76 a type 3 or type S3A may be used. Use of the type 3 meters may result in reduced accuracy. It is recommended that this testing be performed in an area adjacent to the facility entrance.

It is also recommended that all vehicles entering the facility be tested at the time this program is instituted. This has benefits of getting immediate reductions, serving notice that the limits will be enforced, and letting the riders find out at the earliest time if their vehicle requires additional silencing.

Note: It is strongly recommended that all test personnel use appropriate hearing protectors. Cotton and certain "ear valves" may not be adequate.

4. Identification. Vehicles meeting the limits of section 2, when tested as required by section 3, shall be identified by placement of a non-transferable sticker at the rear of the exhaust system, near the exhaust outlet or upon the outside of the muffler.

It is strongly recommended that the sticker be marked to indicate the months and year the test is performed. Stickers shall be considered valid for one year.

The test requirement may be waived for entrance to the facility for any vehicle which has a valid sticker affixed to its exhaust system.

5. Monitoring and Enforcement. Facility personnel are encouraged to circulate through the riding and parking areas, listening for loud vehicles and looking for vehicles without valid stickers.

Vehicles found without stickers should be tested according to the procedure contained in Appendix A, applying the limits of section 2. Those found to comply should be identified as provided in section 4.

Vehicles perceived by facility personnel to be quite loud should also be tested according to Appendix A, applying the limits of section 2. For vehicles found to comply, no action should be taken.

Vehicles found not in compliance when tested for either reason should be required to make necessary corrections or cease operation of the vehicle.

6. Facility Layout. Consideration should be given to location of riding areas to minimize the radiation of sound towards noise sensitive adjoining property. Whenever possible, the following guidelines should be followed to reduce the impact of noise.
 - a. Riding areas anticipating heavy use, should be located away from noise sensitive property.
 - b. Since motorcycles tend to radiate exhaust noise rearward, areas subject to rapid acceleration in a predictable direction should be located such that the vehicles accelerate towards noise sensitive property, and the sound is radiated away.

- c. If necessary, limitations can be placed upon hours of operation, particularly if the nearest noise sensitive property consists of residential areas.
- d. Natural barriers such as hills, ridges, or large stands of trees can sometimes be used to "shield" noise sensitive areas from the sounds of vehicle operation.
- e. Man-made barriers such as walls can have a minor effect on noise propagation, but must either be very close to the noise source or very tall to be effective.

APPENDIX A

MIC STATIONARY TEST MIC/E-76

SOUND LEVELS OF MOTORCYCLES

Approved December 21, 1976

1. Scope. This document establishes the test procedure, environment, and instrumentation for determining sound levels of motorcycles under field conditions. This procedure is designed to be incorporated as part of a motorcycle exhaust system certification program and compliance inspections.

2. Instrumentation.

2.1. The following instrumentation shall be used:

2.1.1. A sound level meter meeting all requirements for type 1, type 2, type S1A or type S2A of American National Standards Institute S1.4-1971 (ANSI S1.4-1971).

2.2. A windscreen which does not affect microphone response more than ± 1 dBA for frequencies of 63-4000 Hz and $\pm 1\frac{1}{2}$ dBA for frequencies of 4000-10,000 Hz, taking into account the orientation angle of the microphone.

2.3. If the motorcycle under test is not provided with a tachometer, then an engine speed tachometer with a steady state accuracy of $\pm 5\%$ shall be used. The tachometer may be a pointer type or a vibrating reed type as long as the accuracy specification is met.

2.4. A calibrator which is capable of checking the sound level meter to an accuracy of ± 0.5 dBA.

3. Test Site.

3.1. The test site shall be a flat open space free of large sound-reflecting surfaces (other than the ground) such as parked vehicles, signboards, buildings, or hillsides, located within 5m (16 ft.) radius of the motorcycle being tested and the location of the microphone.

3.2. The surface of the ground within the area described in Section 3.1., shall be free of loose or powdered snow, plowed soil, grass of a height greater than 15 cm (6 in.), brush, trees, or other extraneous material.

3.3. The microphone shall be located behind, 0.5m (20 in.) $\pm .01\text{m}$ ($\frac{1}{2}$ in.) from, and at the same height as, the rearmost exhaust outlet and at a 45-degree angle (± 10 degree) to the normal line of travel of the motorcycle. The longitudinal axis of the microphone shall be in a plane parallel to the ground plane.

3.4. No wire or other means of distance measurement shall be attached to the microphone. (This may lead to erroneous reading.)

4. Procedure. The rider shall sit astride the motorcycle in normal riding position with both feet on the ground and run the engine with the gearbox in neutral at a speed equal to $\frac{1}{2}$ of the manufacturer's recommended maximum engine speed (red line). If no neutral is provided the motorcycle shall be operated either with the rear wheel 5-10 cm (2-4 in.) clear of the ground, or with the drive chain or belt removed. If no red line is published for the particular motorcycle then an engine speed equal to 60 percent of the engine speed at which maximum horsepower is developed shall be used. If neither red line nor maximum horsepower engine speed is published, then the test speed N shall be calculated from the following formulae:

$$N = 306,000 \div \text{stroke, mm} \quad \text{or} \quad N = 12,000 \div \text{stroke, inches}$$

5. Measurements.

5.1. The sound level meter shall be set for the A-weighting network and should be set for "slow" response. ("Fast" may be used.)

5.2. The sound level recorded shall be that measured during steady state operation at the above-mentioned engine speed, measured on the loudest side of the motorcycle. If tests are to be made on one side of the motorcycle only then they shall be made on the exhaust outlet side. The test RPM shall also be recorded.

5.3. The ambient sound level (including wind effects) at the test site due to sources other than the motorcycle being measured shall be at least 7 dBA lower than the sound level produced by the motorcycle under test.

5.4. Wind speed at the test site during test should be less than 32 Km/hr (20 mph). If this is not possible, then the motorcycle and measuring microphone shall be positioned so that the prevailing wind direction is parallel to the normal direction of travel of the motorcycle.

6. General Comments.

6.1. While making sound level measurements, not more than one person other than the rider and the measurer shall be within 3m (10 ft.) of the motorcycle under test or the microphone, and that person shall be directly behind the measurer on a line through the microphone and the measurer.

6.2. Proper use of all test instrumentation is essential to obtaining valid measurements. Operating manuals or other literature furnished by the instrument manufacturer should be referred to for both recommended operation of the instrument and precautions to be observed.

6.3. Specific items for consideration:

6.3.1. The type of microphone, its directional response characteristics, and its orientation relative to the ground plane and the sources of sound.

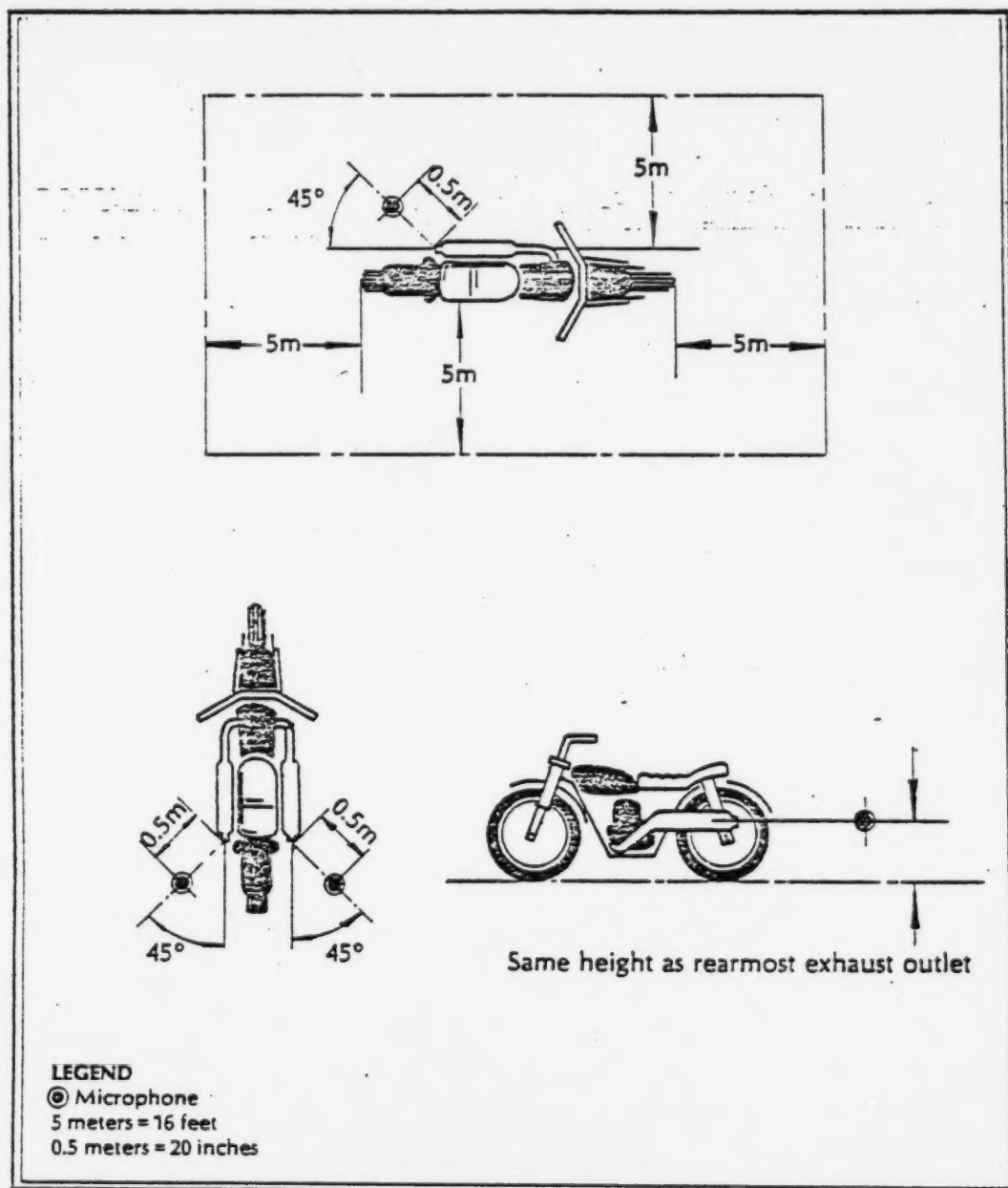
6.3.2. The effects of ambient weather conditions on the performance of all instruments (e.g., temperature, humidity and barometric pressure).

6.3.3. Proper acoustical calibration procedure to include the influence of extension cables, etc. Field calibration should be made immediately before the first test of each test day, and thereafter at intervals of no less than 1 hour. Internal calibration is acceptable for field use, provided that external (acoustical) calibration is accomplished immediately before and after each test day.

6.4. The procedure is intended for use as a pass-fail test. When limits are specified to be measured by this procedure, they should be set at maxima, with no additional tolerance permitted. However, it may be appropriate to consider variations in sound level meters, tachometers, or motorcycles, which although ostensibly the same, may not warrant failure of an inspection for small measurement differences.

6.5. The use of the word "shall" in the procedure is to be understood as obligatory. The use of the word "should" is to be understood as advisory.

Diagrams of the Motorcycle and Microphone Arrangement



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U. S. Environmental Protection Agency, "Effects of Noise on Wildlife and Other Animals," EPA Report NTID300.5, December 31, 1971.

INSTRUMENTATION

Sound Level Meters

- (a) B & K Instruments
1440 S. State College Blvd., Bldg. 1A
Anaheim, CA 92806
Phone (714) 778-2450

Type 1 Model 2206 \$1174
Type 2a Model 2219 \$407

- (b) Gen Rad
17361 Armstrong Avenue
Santa Ana, CA 92714
Phone (714) 540-9830

Type 1a Model 1981b \$975
Type 2 Model 1565 \$375

- (c) Quest Sound Level Meters
HW Acoustics Inc.
P.O. Box 542
San Dimas, CA 91773
(213) 921-7213

Type S2a Model 211A-12W Kit \$360

- (d) American Motorcyclist Association
Attn: Sales Department
P.O. Box 141
Westerville, Ohio 43081
Phone (614) 891-2425

Type 3a Model DS \$150

TACHOMETERS

Vibrating Reed Tachometers

- (a) Stanco Tachometer available from
Herman Sticht Co., Inc.
27 Park Pl.
New York, NY 10007
Phone (212) 732-8163

(b) Briggs & Stratton
3300 N. 124th Avenue
Milwaukee, Wisconsin 53222
Phone (414) 461 1212

(c) Fowler Vibratak available from
Herbach & Rademan, Inc.
401 E. Erie Ave.
Philadelphia, PA 19134
Phone (215) 426-1700

Verdell Instrument Sales Co.
P.O. Box 3821
San Clemente, CA 92672

Electronic Shop Tachometers
Sanwa MT-03 Tachometer
Part No. 09900-26002
Available from Suzuki Dealers

HEARING PROTECTORS

Muffs

(a) American Optical Co.
Safety Products Division
14 Mechanic St.
Southbridge, MA 01550

(b) Bausch & Lomb
Safety Products Division
P.O. Box 478
Rochester, NY 14624

(c) Bilsom International, Inc.
11800 Sunrise Valley Dr.
Reston, VA 22091

(d) David Clark Co.
360 Franklin St.
Worcester, MA 01604

(e) Fibre Metal Products
Concordville, PA 19331

(f) Flents Products Co., Inc.
14 Orchard St.
Norwalk, CT 06850

(g) Glendale Optical Co., Inc.
130 Crossways Park Dr.
Woodbury, NY 11797

(h) HW Acoustics Inc.
P.O. Box 542
San Dimas, CA 91773

(i) Labaire Ear Protector Co.
Midtown Mall
Front St.
Worcester, MA 01608

(j) Mine Safety Appliances Co.
400 Penn Center Blvd.
Pittsburgh, PA 15235

(k) Norton Co.
Safety Products Division
2000 Plainfield Pike
Cranston, RI 02920

(l) Safety Direct
P.O. Box 8907
Reno, NV 89507

(m) Sellstrom Manufacturing Co.
P.O. Box 355
Palatine, IL 60067

(n) Willson Products Division
ESB Inc.
P.O. Box 622
Reading, PA 19603

Plugs

(a) Bilsom International, Inc.
11800 Sunrise Valley Dr.
Reston, VA 22091

(d) HW Acoustics Inc.
P.O. Box 542
San Dimas, CA 91773

(b) EAR Corp.
376 University Ave.
Westwood, MA 02090

(e) Marion Health & Safety, Inc.
1515 Elmwood Rd.
Rockford, IL 61101

(c) Flents Products Co., Inc.
14 Orchard St.
Norwalk, CT 06850

Explanation:

The required meter measures dBA, i.e. measures sound intensity in decibels (dB) as heard by the human ear (A-weighted scale). Type 1, 1a, 2, 2a, 3, 3a all measure dBA. (The presence of an "a" in the Type indicates only the a-weighted scale can be measured). Meter accuracy is indicated by the Type number (regardless of the weighting scale), i.e. Type 1 is designed to be more accurate than Type 2; Type 2 more accurate than Type 3. For legal purposes a Type 3 meter is unrecognized. However, this does not mean that a jurisdiction will necessarily recognize a Type 2 or even a Type 1. This information must be obtained from your own controlling governmental agency.

Among all the meters of each individual type mentioned above, disregarding weighting scale all have comparable features and capabilities.

Disclaimer:

MIC makes no claim and gives no warranty, express or implied, as to the adequacy of any instrument in any respect. The above is offered as gratuitous information and is not meant as a recommendation.

A great number of other instruments are available on the market. The choice is yours. Prices and model availability are subject to change without notice and are not within the control of MIC.

Appendix III
Summary of Minibike Regulations

Questions and Answers about
Minibiking in Montgomery County
and the State of Maryland

Question: What are the existing laws governing the use of minibikes in Montgomery County and the State of Maryland?

Answer: It is unlawful to operate a minibike anywhere in Montgomery County or the State of Maryland other than on private property, with the written permission of the owner. The operator is required to wear goggles and a safety helmet which meets the Maryland Motor Vehicle Administration standards. In the City of Rockville, the operation of minibikes is permitted only on property zoned C2 (commercial), with the owners' permission, and the operator must wear goggles and a helmet.

Question: What do Maryland landowner liability laws say about the use of minibikes on private property?

Answer: Upon receipt of written permission to use private property for recreational purposes, the minibike operator assumes all liability for his person and property while on the landowners' premises, unless it can be proven that the landowner willfully or maliciously failed to guard against a dangerous condition on his property, or failed to notify potential users of situations where he knows they will be harmed.

Question: Where can I find trails specifically set aside for ORV use, including minibikes?

Answer: The State of Maryland operates and maintains ORV trails in Garrett, Allegany, and Worcester Counties for public use, however, these trails are subject to certain restrictions and regulations. For more information contact:

Maryland Department of Natural Resources
Tawes State Office Building
Annapolis, Maryland 21401

or

Maryland Department of Natural Resources
Laurel Regional Service Center

P.O. Box 70
29 C Street

Laurel, Maryland 20810

Phone: 776-5411

Maps showing the Maryland Department of Natural Resources trails are available at this table.

Notes on Minibiking

In recent years, minibikes have gained popularity as a recreational attraction in the United States and this is no less true in Montgomery County. As more and more people become owners of minibikes and begin riding, more and more complaints have been heard about such things as irresponsible riding habits (riding on lawns, sidewalks, and streets) and creating too much noise.

Remember! Noise from minibikes can be annoying. Please be mindful of your neighbor by not riding at odd hours, and seek out places to ride which are as isolated as possible from houses and apartment buildings where people live. In this way, you can prevent the possibility of stricter regulations for minibikes in the future.

Maintenance Hints

A must after every ride:

- (1) Lubricate chain and check adjustment;
- (2) Tighten nuts, screws;
- (3) Check air filter and clean it if necessary;
- (4) Check muffler and exhaust system for holes, cracks, or other damage.

Before you ride:

- (1) Check the clutch, throttle, and brake cables for fraying, loosening, and adjustment;
- (2) Consult maintenance manual for maintenance tasks you can do yourself. Preventive maintenance is your best insurance against mechanical failure, and possible damage to you or your bike.

Appendix IV
Landowner/Liability Laws by State
with
Phone Numbers to Obtain Legislation
Laws By State

In order to become familiar with the terms and the status of landowner liability in your state, we have provided below a list of statutes by number. We have listed also the number of legislative service you may call to obtain a copy of your state's law.

<u>State</u>	<u>Law</u>	<u>Source of Info</u>
Alabama	Ala. Code tit. 47 § 281 (1973)	(205)269-6011
Alaska	None	(907)465-2111
Arizona	None	(602)271-4900
Arkansas	AZ Stat. Ann. § 50-1101 (1971)	(501)371-3000
California	CA Civ. Code § 846 (1976)	(916)445-4711
Colorado	CO Rev. Stat. § 33-41-101 (1973) § 33-41-106 (1975)	(303)892-9911
Connecticut	CT Gen. Stat. Ann. § 52-557f (1976)	(203)566-2211
Delaware	DE Code Ann. tit. 7 § 5901 (1975)	(302)678-4000
Florida	FL Stat. Ann. § 375.251 (1974) § 375.251(5) (1976-77)	(904)488-1234
Georgia	GA Code Ann. § 105-403 (1968)	(404)656-2000
Hawaii	HI Rev. Stat. § 520 (1975)	(808)548-2211
Idaho	ID Code § 36-1604 (1976)	(208)384-2411
Illinois	IL Ann. Stat. ch 70 § 31 (1976-77)	(217)782-2000
Indiana	IN Code Ann. § 4-16-3-1 (1974) § 14-1-3-18 (1973) § 14-2-6-3 (1973)	(317)633-4000
Iowa	IA Code Ann. § 111C.1 (1976)	(515)281-5011
Kansas	KS Stat. Ann. § 58-3201 (1975)	(913)296-0111
Kentucky	KY Rev. Stat. Ann. § 411.190 (1976)	(502)564-2500

<u>State</u>	<u>Law</u>	<u>Source of Info</u>
Louisiana	LA Rev.Stat.Ann. § 9-2795 (1976)	(504)389-6601
Maine	ME Rev.Stat.Ann. tit. 12 § 3001 (1974)	(207)289-1110
Maryland	MD Nat.Res.Code Ann. § 5-1101 (1974)	(301)267-0100
Massachusetts	MS Ann.Laws.ch. 21 § 17C (1973)	(617)727-2121
Michigan	Mi Comp.Laws Ann. § 300.201 (1976-77)	(517)373-1837
Minnesota	MN Stat.Ann. § 87.01 (1977)	(612)296-6013
Mississippi	None	
Missouri	None	
Montana	MT Rev.Codes Ann. § 67-808 (1970)	(406)499-2511
Nebraska	NE Rev.Stat. § 37-1001 (1974)	(402)471-2311
Nevada	NV Rev.Stat. § 41.510 (1975)	(702)885-5000
N. Hampshire	NH Rev.Stat.Ann. § 212-34 (1973)	(603)271-1110
New Jersey	NJ Stat.Ann. § 2A-42A-1 (1976-77)	(609)292-2121
New Mexico	NM Stat.Ann. § 53-4-51 (1975)	(505)827-4011
New York	NY Gen.Oblig.Law § 9-103 (1976-77)	(518)472-8800
North Carolina	NC Gen.Stat. § 113-120.5 (1975)	(919)733-4111
North Dakota	ND Cent.Code § 53-08-01 (1974)	(701)224-2000
Ohio	OH Rev.Code Ann. § 1533.18 (1964) § 1533.181 (1975)	(614)466-2000
Oklahoma	OK Stat.Ann.tit. 76 § 10 (1976)	(405)521-2011
Oregon	OR Rev.Stat. § 105.655 (1975)	(503)378-3131
Pennsylvania	PA Stat.Ann.tit. 68 § 477-1 (1976-77)	(717)787-2121

<u>State</u>	<u>Law</u>	<u>Source of Info</u>
Rhode Island	None	
South Carolina	SC Code § 51-81 (1975)	(803) 758-0221
South Dakota	SD Compiled Laws Ann. § 20-9-5 (1976)	(605) 224-3011 4
Tennessee	TN Code Ann. § 11-1301 (1973) § 51-801 (1966)	(615) 741-3011
Texas	TX Civ.Stat.Ann.tit. 1 Art. 1b (1969)	(512) 475-2323
Utah	None	
Vermont	VT Stat.Ann.tit. 10 § 5212 (1973)	(802) 828-1110
Virginia	VA Code § 8-654.2 (1976)	(804) 786-0000
Washington	WA Rev.Code Ann. § 4.24.200 (1975)	(206) 753-5000
West Virginia	WV Code § 19-25-1 (1971)	(304) 348-3456
Wisconsin	WI Stat.Ann. § 29.68 (1) (2) and (4) (1973) § 29.68 (3) and (5) (1976-77)	(608) 266-0341
Wyoming	WY Stat. § 34-389.1 (1975)	(307) 777-7011

Appendix V
State of Maryland Landowner/Liability Law
and
Legal Interpretation

§ 5-1005

ANNOTATED CODE OF MARYLAND

in the execution of those plans adopted by it for reforestation of the state (An. Code 1957, art. 66C, § 371; 1973, 1st Sp. Sess., ch. 4, § 1.)

REVISOR'S NOTE

This section presently appears as Article 66C, § 371 of the Code. This section is reprinted since the land in question has been purchased by the state. The final sentence has been repeated, as directed, because the money in question

appropriated to the department was for the purposes of purchasing the property; this has been confirmed by the department. The only other changes made are in style.

§ 5-1005. Auxiliary state forest reserves.

The department may accept the use of land to be used for auxiliary state forest reserves and enter into agreements with the owners as necessary. The land is subject to all laws, rules, and regulations governing state forest reserves. However, no money appropriated to the department may be used or expended on auxiliary state forests for permanent improvements or for any purpose other than supervision, opening of trails, the building of temporary structures to make the land available for campers and visitors, and protection of the land from fire and trespass. (An. Code 1957, art. 66C, § 373; 1973, 1st Sp. Sess., ch. 4, § 1.)

REVISOR'S NOTE

This section presently appears as Article 66C, § 373 of the Code. The only changes made are in style.

§ 5-1006. Free admission to state parks for certain youth groups.

Youth groups registered with the Secretary shall be admitted to any Maryland state park free of any admission or overnight camping charge. This exemption shall apply only when the group is participating in official activities under adult supervision. For the purpose of this section youth group includes, but is not limited to boy scouts, girl scouts, 4-H members, and other affiliated groups. The Secretary may restrict this privilege when the parks are being used to capacity by the public. (An. Code 1957, art. 66C, § 345A; 1973, 1st Sp. Sess., ch. 4, § 1.)

REVISOR'S NOTE

This section presently appears as Article 66C, § 345A. The only changes made are in style.

Subtitle 11. Public Recreation on Private Land.

§ 5-1101. Definitions.

(a) *Generally.* — In this subtitle, the following words have the meanings indicated.

REVISOR'S NOTE

This subsection presently appears as the first clause of Article 66A, § 410K of the Code. The only changes made are in style.

NATURAL RESOURCES

§ 5-1102

(b) "Charge" means price or fee asked for services, entertainment, recreation performed, or products offered for sale on land or in return for invitation or permission to enter or go upon land.

REVISOR'S NOTE

This subsection presently appears as Article 66C, § 410K (c) of the Code. The only changes made are in style.

(c) "Educational purpose" includes, but is not limited to any of the following, or any combination of the following: nature study, farm visitations for purposes of learning about the farming operation, practice judging of livestock, dairy cattle, poultry, other animals, agronomy crops, horticultural crops, or other farm products, organized visits to farms by school children, 4-H clubs, FFA clubs and others as part of their educational programs, and viewing historical, archaeological, or scientific sites.

REVISOR'S NOTE

This subsection presently appears as Article 66C, § 410K (d). It is redesignated subsection (c) for purposes of organization. The only other changes made are in style.

(d) "Land" means land, roads, water, watercourses, private ways and buildings, structures, and machinery or equipment when attached to realty.

REVISOR'S NOTE

This subsection presently appears as Article 66C, § 410K (a) of the Code. The only changes made are in style.

(e) "Owner" means the possessor of a fee interest, tenant, lessee, or person who possesses the premises.

REVISOR'S NOTE

This subsection presently appears as Article 66C, § 410K (b) of the Code. The only changes made are in style.

(f) "Recreational purpose" includes the following or any combination of the following: hunting, fishing, swimming, boating, camping, picnicking, hiking, pleasure driving, nature study, water skiing, winter sports, horseback riding or horse driving, operating motorized recreational vehicles and viewing or enjoying historical, archaeological, scenic, or scientific sites.

REVISOR'S NOTE

This subsection presently appears as Article 66C, § 410K (e) of the Code. The only changes made are in style.

(An. Code 1957, art. 66C, § 410K; 1973, 1st Sp. Sess., ch. 4, § 1.)

§ 5-1102. Purpose and construction of subtitle.

(a) *Purpose.* — The purpose of this subtitle is to encourage any owner of land to make land and water areas available to the public for any recreational and educational purpose by limiting the owner's liability toward any person who enters on land and water areas for these purposes.

§ 5-1103

ANNOTATED CODE OF MARYLAND

REVISOR'S NOTE

This subsection presently appears as Article 66C, § 410J of the Code. The only changes made are in style.

(b) *Construction.* — This subtitle does not: (1) create a duty of care or ground of liability for injury to persons or property, (2) relieve any person using the land of another for any recreational or educational purpose from any obligation which he might have in the absence of this subtitle to exercise care in using the land and in his activities on the land, or from the legal consequences of his failure to employ care.

REVISOR'S NOTE

This subsection presently appears as Article 66C, § 410P of the Code. The only changes made are in style.

(An. Code 1957, art. 66C, §§ 410J, 410P; 1973, 1st Sp. Sess., ch. 4, § 1.)

§ 5-1103. Landowner not required to keep premises safe for recreational use.

Except as specifically recognized by or provided in § 5-1107, an owner of land owes no duty of care to keep the premises safe for entry or use by others for any recreational or educational purpose, or to give any warning of a dangerous condition, use, structure, or activity on the premises to any person who enters on the land for these purposes. (An. Code 1957, art. 66C, § 410L; 1973, 1st Sp. Sess., ch. 4, § 1.)

REVISOR'S NOTE

This section presently appears as Article 66C, § 410L of the Code. The only changes made are in style.

§ 5-1104. Liability of landowner who permits recreational use of land without charge.

Except as specifically recognized by or provided in § 5-1107, an owner of land who either directly or indirectly invites or permits without charge persons to use the property for any recreational or educational purpose does not by his action:

Extend any assurance that the premises are safe for any purpose, confer upon the person the legal status of an invitee or licensee to whom a duty of care is owed, or assume responsibility for or incur liability as a result of any injury to the person or property caused by an act of omission of the person. (An. Code 1957, art. 66C, § 410M; 1973, 1st Sp. Sess., ch. 4, § 1.)

REVISOR'S NOTE

This section presently appears as Article 66C, § 410M (a) through (c), inclusive of the Code. The only changes made are in style.

§ 5-1105. Applicability of §§ 5-1103 and 5-1104 to land leased by the state.

Unless otherwise agreed in writing, the provisions of § 5-1103 and 5-1104 are applicable to any duty and liability of an owner of land leased to the state or any of its political subdivisions for any recreational or educational purpose. (An. Code 1957, art. 66C, § 410N; 1973, 1st Sp. Sess., ch. 4, § 1.)

REVISOR'S NOTE

This section presently appears as Article 66C, § 410N of the Code. The only changes made are in style.

§ 5-1106. Liability for willful or malicious conduct; liability of landowner who charges for recreational use of land.

The provisions of this subtitle do not limit in any way any liability which otherwise exists for willful or malicious failure to guard or warn against a dangerous condition, use, structure, or activity; or for injury suffered where the owner of the land charges the person who enters or goes on the land for recreational or educational use. However, if land is leased to the state or any of its political subdivisions, any consideration the owner receives for the lease is not a charge within the meaning of this section. (An. Code 1957, art. 66C, § 410-O; 1973, 1st Sp. Sess., ch. 4, § 1.)

REVISOR'S NOTE

This section presently appears as Article 66C, § 410-O (a) and (b) of the Code. The only changes made are in style.

§ 5-1107. Notice by landowner of private lands; written consent to enter private lands.

Whenever the owner desires, he may post in conspicuous places notices informing the public that the land is private. The landowner, by written consent, may grant permission to enter on the land. (An. Code 1957, art. 66C, § 410Q; 1973, 1st Sp. Sess., ch. 4, § 1.)

REVISOR'S NOTE

This section was added as Article 66C, § 410Q of the Code by Chapter 579, Acts of 1972. The only changes made are in style.

§ 5-1108. Permission cards.

- (a) To facilitate a method of providing written consent, the Secretary shall distribute permission cards, to be available to the public and to landowners.
- (b) One side of the card shall read:

§ 5-1201

ANNOTATED CODE OF MARYLAND

PERMISSION TO ENTER

I hereby grant the person named on the reverse side permission to enter on my property, subject to the terms of the agreement, on the following dates:

Signed
(Landowner)

(c) The reverse side shall read:

AGREEMENT

In return for the privilege of entering on the private property for any recreational or educational purpose as defined in the Natural Resources Article § 5-1101, I agree to adhere to every law, observe every safety precaution and practice, take every precaution against fire, and assume all responsibility and liability for my person and my property, while on the landowner's property.

Signed

(An. Code 1957, art. 66C, § 410R; 1973, 1st Sp. Sess., ch. 4, § 1.)

REVISOR'S NOTE

This section was added as Article 66C, § 410R of the Code. The only changes made are in style.

Subtitle 12. Wildland and Open Areas.

Part I. Open Space or Open Areas.

§ 5-1201. Definitions.

(a) *Generally.* — In this subtitle, the following words have the meanings indicated.

REVISOR'S NOTE

This subsection is new language, reflecting the decision of the commission to provide flexibility in any amendments to this statute.

(b) *"Open space" or "open area."* — In this subtitle, "open space" or "open area" means any space or area characterized by great natural scenic beauty, or whose existing openness, natural condition, and present state of use, if retained, would enhance the present or potential value of abutting or surrounding urban development, or maintain or enhance the conservation of natural or scenic resources.

REVISOR'S NOTE

This subsection presently appears as Article 66C, § 357A (b) of the Code. The only changes made are in style.

(c) *"State wildlands"* means "wildlands" owned by the state and includes the following three types:

Type 1. A primitive area which by its size or location is in effect untouched by urban civilization, and can offer the experience of solitude and



metropolitan washington
COUNCIL OF GOVERNMENTS
1225 Connecticut Avenue, N.W., Washington, D. C. 20036 223-6800

INTEROFFICE
MEMORANDUM

October 25, 1978

TO: Steven Larson
Health and Environmental Protection

FROM: Legal Staff *AS*

RE: Interpretation of Maryland Law, §5-1005 et seq.,
Annotated Code of Maryland, Public Recreation on
Private Land

This memorandum is in reference to your request for an interpretation of Chapter 5, Subtitle 11, of the Natural Resources Code of the State of Maryland, as it applies to landowner-liability towards mini-bike users of his property.

Generally, there is a common-law duty imposed upon owners of land to maintain their premises in a reasonably safe manner and give timely warnings to potential users of the property of dangerous conditions located upon the premises.

Subtitle 11 abrogates this duty where:

- 1) trespassers use the premises for educational or recreational purposes;
- 2) persons either directly or indirectly invited by the owner are permitted to use the premises for educational or recreational purposes.

Recreational purposes has been broadly defined by the State legislature to include the analogous activity of mini-bike riding.

This is not to say that the land owner owes no duty of care to the above enumerated users. A lower standard of care, on the part of the landlord, is substituted whereby he cannot intentionally or maliciously fail to guard against a dangerous condition upon his property, nor fail to notify potential users of situations where he knows they will be harmed.

In the situation where the landowner charges private persons for the educational or recreational use of his

property, they are considered his invitees, and he will be required to maintain the premises reasonably safe and give notice of any dangers he has knowledge of.

The landowner has the option of posting his lands as private, but this will reactivate the common-law duties of care to users unless the owner gives written permission through a State Permission Card.

Appendix VI

Bureau of Outdoor Recreation Regional Offices

BOR Regional Offices

NORTHWEST

Regional Director
915 Second Avenue, Room 990
Seattle, Washington 98174

Idaho, Oregon, Washington

PACIFIC SOUTHWEST

Regional Director
Box 36062
450 Golden Gate Avenue
San Francisco, California 94102

American Samoa, Arizona
California, Guam, Hawaii, Nevada.

MID-CONTINENT

Regional Director
P.O. Box 25387
Denver Federal Center
Denver, Colorado 80225

Colorado, Iowa, Kansas, Missouri
Montana, Nebraska, North Dakota
South Dakota, Utah, Wyoming.

SOUTH CENTRAL

Regional Director
5000 Marble Avenue, N.E.
Albuquerque, New Mexico 87110

Arkansas, Louisiana, New Mexico
Oklahoma, Texas

LAKE CENTRAL

Regional Director
3853 Research Park Drive
Ann Arbor, Michigan 48104

Illinois, Indiana, Michigan,
Minnesota, Ohio, Wisconsin.

SOUTHEAST

Regional Director
148 International Boulevard
Atlanta, Georgia 30303

Alabama, Florida, Georgia, Kentucky,
Mississippi, North Carolina, Puerto
Rico, South Carolina, Tennessee,
Virgin Islands.

NORTHEAST

Regional Director
Federal Office Building
600 Arch Street
Philadelphia, Pennsylvania 19106

Connecticut, Delaware, Maine,
Maryland, Massachusetts, New
Hampshire, New Jersey, New York,
Pennsylvania, Rhode Island,
Vermont, Virginia, West Virginia,
and the District of Columbia.

ALASKA AREA OFFICE:

Regional Director
540 W. 5th Street
Anchorage, Alaska 99501

Appendix VII
Flyer for Minibike Roundup

WHAT'S HAPPENING: OFF-ROAD MINIBIKE ROUNDUP
WHERE: Korvettes Parking Lot
11800 Rockville Pike
Rockville, Maryland
WHEN: Saturday, October 28, 1978
10:00 a.m. to 3:00 p.m.

* * * * *

TRY: Our Skills Test
PRIZES FOR WINNERS

BRING: Your minibike's serial number and register
your bike free. HELP PROTECT AGAINST THEFT.
PRIZES for 1st., 25th., and 50th. registrant.

BRING: Your parents and let them see WHAT'S HAPPENING.
Explore the ANTIQUE FAIR nearby.

LEARN: All about Maryland's off-road minibike regula-
tions and places to go to ride your minibike.

GET: FREE material related to minibike maintenance
and GOOD NEIGHBOR practices.

FIND: How QUIET or NOISY minibikes are. See what
the exhaust emissions are too!

TALK: To an expert on minibike maintenance and
safety. GOT A PROBLEM: HE MAY HAVE AN ANSWER.

SEE: The latest in off-road minibikes.

WHY: The Metropolitan Washington Council of Govern-
ments (COG) in cooperation with the Montgomery
County Department of Environmental Protection
is sponsoring this ROUNDUP to provide off-road
minibike fans an opportunity to get together,
have fun, and learn about ways to make biking
enjoyable for both you and your neighbor.

JOIN US: REMEMBER! Bring information to register your
minibike. If you can't come, register your
bike anyway by filling out the form below.

* * * * *

REGISTRATION FORM

Name: _____
Address: _____
Parents: _____
Brand name: _____

Year: _____ Serial #: _____ Model (CC'S) _____

Mail to: Mr. Steve Larson
Metropolitan Washington Council of Governments
1225 Connecticut Avenue, NW
Washington, D.C. 20036

Appendix VIII
List of Materials Distributed or Used
in
the Development of the Minibike Roundup

Bibliography of Materials for Minibike Roundup
October 28, 1978

A Safety Handbook for Bicycle and Moped Owners; Maryland Department of Transportation.

Announcing the Motorcycle Safety Foundations Motorcycle Rider Course; Motorcycle Safety Foundation (Pamphlet).

Bennett, Shaun, Ph.D., A Trail Riders Guide to the Environment; American Motorcycle Association, August, 1973 (also contained in the MIC Land Use Information Kit).

Cycle Safety Information; Motorcycle Safety Foundation. (A series of information sheets on specific subjects such as helmets, licensing, statistics.)

Facts About Trail Riders, American Motorcyclist Association (no date) (Pamphlet).

Get Into Gear...Get It On! Motorcycle Safety Foundation, 1974 (Pamphlet).

Harrison, Robin, The Effectiveness of Motorcycle Helmets as Hearing Protectors, U.S. Department of Agriculture, Forest Service, September, 1973.

Landowner Liability Laws; American Motorcyclist Association, May 1, 1978.

Land Use Information Kit; Motorcycle Industry Council. (Contains news releases, state legislative reports and other general information.)

McEwen, Douglas N., Ph.D., Turkey Bay Off-Road Vehicle Area at Land Between the Lakes: An Example of New Opportunities for Managers and Riders; Southern Illinois University at Carbondale, Research Report Number 1, January, 1978. Published by American Motorcyclist Association, April 1, 1978.

Montgomery County Bikeways; Montgomery County Department of Transportation, November, 1977.

Motorcycle Rider Course; Motorcycle Safety Foundation, November, 1976.

Motorcycle Safety Foundation (Brochure).

Motorcycle Sound and Noise; Motorcycle Industry Council, 1977 (also contained in Sound Information Kit).

1978 Motorcycle Statistical Annual; Motorcycle Industry Council, Inc., 1978.

MSF: On the Move; Vol. 4, No. 3, Motorcycle Safety Foundation, August, 1978 (Newsletter).

National Recreation Trails - Information and Application Procedure; U.S. Department of the Interior, Bureau of Outdoor Recreation, 1975 (also contained in the Land Use Information Kit).

Noise: A Health Problem; U.S. Environmental Protection Agency, August, 1978.

Noise and Recreational Vehicles; U.S. Environmental Protection Agency, December, 1976.

Noise at Work; U.S. Environmental Protection Agency, February, 1977.

Noise on Wheels; U.S. Environmental Protection Agency, February, 1977.

Questions About Motorcycles and Safety? Ask a Friend. Motorcycle Safety Foundation, 1974.

Razor, Robert, Five State Approaches to Trailbike Recreation Facilities and Their Management, American Motorcyclist Association, 1977.

Razor, Robert, Public Motorcycle Parks: Safety Through Planning; National Safety Congress Transactions, Public Safety Sessions, National Safety Council, Vol. 27, 1974.

Riding Tips for the Motorcyclist; Motorcycle Safety Foundation, 1974.

Sharing the Roadway - Motorists and Motorcyclists in Traffic; Motorcycle Safety Foundation, 1974.

Sound Information Kit; Motorcycle Industry Council. (Folder containing government relations bulletins, technical notices and other general information.)

To the Proud New Owner of a Trailbike...Congratulations! Motorcycle Industry Council, 1972.

Appendix IX

Mini-Survey Form Regarding Specific Use Areas

PLEASE ANSWER ANY OR ALL OF THE FOLLOWING QUESTIONS
AND PLACE IN PILE MARKED "COMPLETED QUESTIONNAIRES."

1. DO YOU OWN A MINIBIKE?

YES NO
2. WOULD YOU LIKE TO OWN ONE OR DO
YOU PLAN TO BUY ONE?

YES NO
3. HOW MANY MINIBIKES ARE THERE
IN YOUR FAMILY? _____
4. DO YOU FAVOR THE ESTABLISHMENT OF
A SPECIAL USE AREA FOR MINIBIKES?

YES NO
5. WOULD YOU BE WILLING TO PAY TO
USE SUCH A FACILITY?

YES NO
6. IF SO, HOW MUCH? (PLEASE GIVE A RANGE) _____
7. HOW FAR WOULD YOU BE WILLING TO
TRAVEL TO USE THIS FACILITY?

DISTANCE TIME
8. DO YOU POSSESS LIABILITY INSURANCE
FOR YOUR MINIBIKE?

YES NO
9. WOULD YOU ACCEPT A SPECIAL USE
SITE FOR MINIBIKES ADJACENT TO
OR NEAR YOUR HOME?

YES NO
10. COMMENTS:

Appendix X:

Letter from Middle Atlantic Moto-Cross Assn., Inc.

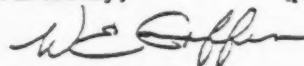
November 2, 1978

Dr. Donna McCord Dickman
Project Manager
Area-wide Environmental Noise Study
Dept. of Health & Environmental Protection
Council of Governments
1225 Connecticut Ave., N.W.
Washington, D.C. 20036

Dear Dr. Dickman,

I would like to thank you again for permitting us to participate in the minibike rally on October 28th in Rockville, Md. I believe the day was a total success. There is a terrific need for this type of activity in the area. The interest is there; the problem is getting the parents interested enough to help the kids participate. We are extremely interested in talking with you and your office staff about the feasibility of jointly sponsoring another get-together of the same type in the spring. Our Association could guarantee enough volunteers to lighten your burden considerably. If your office would provide flyers and advance advertising of the event, our Association might well be able to donate trophies for the occasion. I understand that any further commitments or plans of your office hinge on approval of your program grant; therefore, I will wait to hear from you. If you have any questions, please contact me...in Kensington, Md. at 946-9315

Sincerely,



William E. Griffin
Vice President
Middle Atlantic Moto-Cross Assn., Inc.
3318 McComas Avenue
Kensington, MD 20795

Appendix XI

Letter Samples to Children and Parents
who
Participated in the Minibike Roundup



metropolitan washington
COUNCIL OF GOVERNMENTS
1225 Connecticut Avenue, N.W., Washington, D. C. 20036 223-6800

November 2, 1978

We would like to thank you for participating in our Off-Road Minibike Roundup on Saturday, October 28, 1978. In addition to registering your minibike and having a chance to test your riding skills on our skills' course, we hope you learned about noise and air pollution, two things which can be a problem with minibikes if you aren't careful. The two most important things are to be cautious where you ride and when you ride.

You will receive your registration card in the mail. Good luck and thanks again!

Sincerely,

Donna McLeod Dickman, Ph.D.
Program Manager
Areawide Environmental Noise Program
Health & Environmental Protection

Stephen D. Larson
Research Assistant
Health & Environmental Protection

11-1



metropolitan washington
COUNCIL OF GOVERNMENTS
1225 Connecticut Avenue, N.W., Washington, D. C. 20036 223-6800

November 2, 1978

We would like to thank you for taking the time to bring your children to our Off-Road Minibike Roundup on Saturday, October 28.

It was our intention to acquaint you with the very real problem of noise pollution and the potential problem of air pollution which arises from the careless use of off-road minibikes. On the other hand, by distributing maps of off-road vehicle trails run by the state, and bringing you into contact with an organization such as the Middle Atlantic Motocross Association (MAMA), we attempted to make known to you some of the alternatives which are available.

If you would like to receive copies of any of the material which was available at the minibike roundup, such as trail maps, registration forms, survey forms, general information, or if you have any comments on the minibike roundup, please call us at the phone numbers below and we will be happy to send it to you. We can also put you in touch with Mr. Bill Griffin of the MAMA. Thanks again for your cooperation.

Sincerely,

Donna McCord Dickman, Ph.D.
Program Manager
Areawide Environmental Noise Program
Health & Environmental Protection
Telephone: 223-6800, extension 275

Stephen D. Larson
Research Assistant
Health & Environmental Protection
Telephone: 223-6800, extension 373

11-2

Appendix XIIText from Motorcycle
Industry Council's Public
Service Announcements

1. Hi, is this the west road to the quarry? Sure, it's a good ride, just follow me! Forget it, let's go this way. No one likes a loud motorcycle. If you ride a trail bike, keep it quiet, let others enjoy their share of the woods.
2. Trail riding can be a lot of fun, but there are certain things you should consider before you ride. Ride safely using proper equipment. Respect the environment. Respect other trail users. Protect the rights of land owners.
3. If your youngster wants a minibike, there are certain things you should consider. Who will give him or her proper instruction, where can he ride his bike legally, does he have protective clothing and equipment? Will you take the time to provide proper supervision? Learn the regulations governing minibikes and teach your young rider respect for the environment, land owner, and other trail users.